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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/726,891	12/04/2003	Satoru Kamano	YMOR:300	4184

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EXAMINER

NGUYEN, TUNG X

ART UNIT PAPER NUMBER

2829

DATE MAILED: 03/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/726,891

Applicant(s)

KAMANO ET AL.

Examiner

Tung X. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on the amendment filed 12/21/05.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 6-11 is/are rejected.
- 7) ☒ Claim(s) 5 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 December 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the control/communication card comprises a device measuring unit" recited in claim 7 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

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2. Claim 7 is objected to because of the following informalities: the control/communication card comprises a device measuring unit; the claim 1 conflicted with the claim 7, because of "a control/communication card comprising a board different for the device measuring unit circuit board" recited in claim 1. Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-4, 7, 9, 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mori et al. (u.s.p 6,628,137); in view of Swoboda et al. (u.s.p 6,032,268).

As to claim 1, Mori et al. disclose in Figs. 1-5, an ancillary equipment for testing a semiconductor integrated circuit comprising: a device measuring unit (21 of figure 1) comprising a measuring section (23 of figure 1), and an analyzing section (25 of figure 1); wherein the measuring section (23 of figure 1) for exchanging a signal (transmitted/received between DUT 11 and 23, 25 of figure 4B) with a measured device under test (DUT 11 of figure 4B), the analyzing section (25 of figure 1) for analyzing the information from the measuring section by using a programmable device (26 of figure 4B); and a control/communication card (24 of figure 2) locating in the same board from the device measuring unit circuit board (23 of figure 2); wherein the control/communication card (24 of figure 2) being connected to the device measuring

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unit (23 of figure 2) to control the device measuring unit and for sending analyzed results back to a general-purpose computer (40A of figure 1) and receiving a diagnostic signal (col. 5, lines 25-35). Mori et al. is silent about the control/communication card to be considered as control/communication section embedding on a board different from measuring unit. However, Swoboda et al. disclose the control/communication card comprising a board (1141 of figure 23) separating the measuring unit (1651 of figure 23). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the system of Mori et al., and provide the control/communication card separating with the measuring unit, as taught by Swoboda et al., for easy to replace or exchange the improved or new control/communication card, and avoid the interference signal between the measuring unit and controller unit.

As to claim 2, Mori et al. disclose in Figs. 1-5, the control/communication card (64 of figure 5) includes a data input section (BUSY) for acquiring data from the device measuring unit (col. 5, lines 35-45); a control signal output section for transmitting a control signal to the device measuring unit (col. 4, lines 25-30), and an interface (28 of figure 1) for exchanging a signal with the general-purpose computer (40A of figure 1, and col. 5, lines 25-35).

As to claims 3, 9, Mori et al. disclose in Figs. 1-5, the device measuring unit (66 of figure 5) includes a program writing port for permitting a program to be written on the programmable device of the device measuring unit from the general-purpose computer (40 of figure 5); and the programmable device is Flash-ROM (70 of figure 5).

As to claim 4, Mori et al. discloses in Figs. 1-5, the device measuring unit (23 of figure 2) or the control/communication card (24 of figure 2) comprises a terminal (43 of figure 4B) for receiving an input/output signal and an internal signal of the device measuring unit.

As to claims 7, 11, Mori et al. disclose in Figs. 1-5, the control/communication card (21 of figure 2) comprises a device measure diagnosing unit (25 of figure 2) for transmitting a diagnostic signal for diagnosing the device under test (DUT) to the device measuring unit (23 of figure 2) and transferring diagnostic result data from the device measuring unit to the general-purpose computer (40C of figure 2).

5. Claims 6, 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mori et al. (u.s.p 6,628,137); in view of Swoboda et al. (u.s.p 6,032,268), and further in view of Maeda et al. (u.s.p 4,467,275).

As to claim 6, Mori et al. in view of Swoboda et al. disclose all of the limitations except for the device measuring unit comprising a plurality of input terminals for receiving signals from a plurality of circuits located on the device, and an input signal selector for selecting and switching signals from the plurality of input terminals.

However, Maeda et al. disclose in Figs. 2, the device measuring unit (2A-D of figure 2) comprising a plurality of input terminals (20 of figure 2) for receiving signals (via 2A-D of figure 2) from a plurality of circuits located on the device (20), and an input signal selector (22 of figure 2) for selecting and switching signals from the plurality of input terminals for measuring each desired characteristics of device under test. Therefore, It would have been obvious to a person having ordinary skill in the art at the time the

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invention was made to modify the system of Mori et al., in view of Swoboda et al., and provide the device measuring unit having a plurality of input terminals, as taught by Maeda et al, for measuring each desired characteristics of device under test.

As to claim 8, Mori et al., in view of Swoboda et al. disclose all of the limitations except for a plurality of device measuring units for performing a test using one or more of the device measuring units. However, Maeda et al. disclose in Fig. 2, a plurality of device measuring units (2A-D of figure 2) for performing a test using one or more of the device measuring units (via 22). Therefore, It would have been obvious to a person having ordinary skill in the art at the time the invention was made to system of Mori et al., in view of Swoboda et al., and provide the plurality of device measuring using (2A-D of figure 2), as taught by Maeda et al., for saving time and quickly performing to test plurality of device under test.

6. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mori et al. (u.s.p 6,628,137); in view of Swoboda et al. (u.s.p 6,032,268), and further in view of Kurihara (u.s.p 6,255,843).

As to claim 10, Mori et al. in view of Swoboda et al., disclose all of the limitations except for the device measuring unit comprises a socket for mounting thereon with the device under test is provided in the device measuring unit. However, Kurihara disclose in Fig. 4, the device measuring unit (200 of figure 4) comprising a socket for mount thereon with device under test (DUT 300) is provided in the device measuring unit for easy to remove and exchange the device under test. Therefore, It would have been obvious to a person having ordinary skill in the art at the time the invention was made to

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modify the system of Mori et al. in view of Swododa et al., and provide the socket, as taught by Kurihara, for easy to remove and exchange the device under test.

Allowable Subject Matter

7. Claim 5 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

As to claim 5, the prior art does not teach or suggest the device measuring unit comprises a connector for making connection via a cable with a substrate having a socket for mounting a device under test; and a connector for insertion directly into the substrate; in combination with the other claimed features.

Response to Arguments

8. Applicant's arguments, see "Remark" on pages 5-7, filed 12/21/05, with respect to claims 1-10 have been fully considered and are persuasive. The rejection of claim 1-10 has been withdrawn.

Conclusion

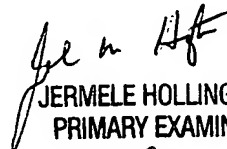
9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tung X. Nguyen whose telephone number is (571) 272-1967. The examiner can normally be reached on 8:30am-5:00pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wael Fahmy can be reached on (571) 272-1705. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TN
3/01/06


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